

Sparrow Apparels Ltd. (Extension)

251 Chandoan, Luxmipura, Gazipur

(23.993605, 90.405174)

2 March 2025

Structural Inspection Report



1. Building Information:

ETP-Building-5,	4-storied (G+3) RC building.
New Warehouse Shed,	Single-storied steel building with 2 mezzanine floors.
Fabric Segregation Shed,	Two-storied (G+1) steel building.
Washing Store Shed,	Single-storied steel building with 1 mezzanine floor.
Chemical Store Shed,	Single-storied steel building
Parking & ATM Booth Shed and	Single-storied steel building
Playground Shed	Single-storied steel building

2. Observations

Observation-1: Lack of design documents. (ETP-Building# 5)



Description: As per BNBC, every building or structure designed shall have its design documents prepared following the provision of Section 1.9.1. The design document shall include a design report and a set of structural drawings, which shall be prepared in compliance with sections 1.9.1.1 and 1.9.1.2 as per BNBC.

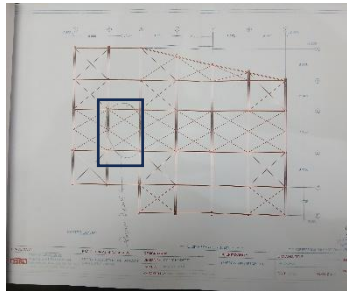
At the time of inspection, design documents (design report, load plan, and adequate material test reports) were not available, which are required to be prepared in compliance with section 1.9.1 (part-6, BNBC).

Observation-2: Non-structural elements found unbraced/not anchored. (ETP-Building# 5)

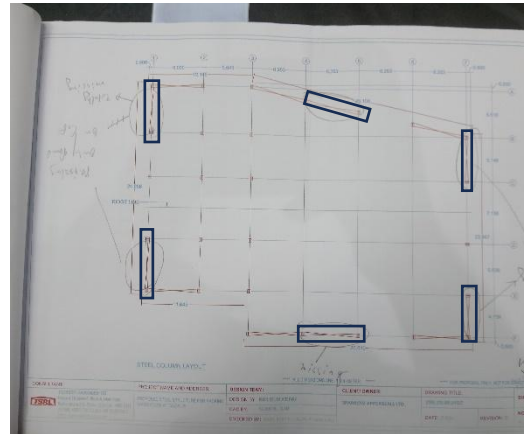


Description: Non-structural elements suspended from, attached to, or resting atop the structure shall be adequately anchored and braced to resist earthquake forces. The factory is required to brace/anchor all non-structural elements.

Observation-3: Lack of design documents and lateral stability. (New warehouse shed)



Missing horizontal
bracing in the marked
location

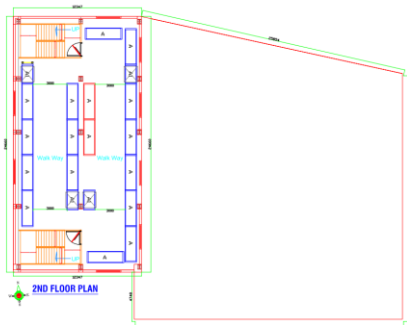
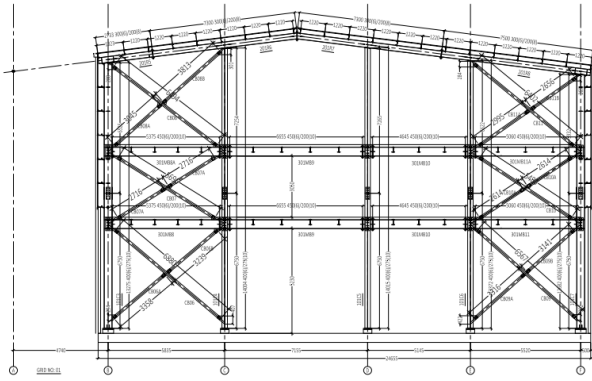


Missing vertical bracing in the marked
location

Description: Horizontal & Vertical bracing was found missing in the marked location. Also, no design documents were observed during the inspection. As per BNBC, every building or structure designed shall have its design documents prepared following the provision of Section 1.9.1. The design document shall include a design report and a set of structural drawings, which shall be prepared in compliance with sections 1.9.1.1 and 1.9.1.2 as per BNBC.

The building engineer is required to prepare an Engineering Assessment (EA) and check the lateral stability of the shed.

Observation-4: Mismatch in as-built drawings. (New warehouse shed)



Description: Eccentric bracing found onsite drawings show concentric bracing, bracing size does not match the site condition, architectural drawing, strut orientation not match with the site condition.

Building engineer is required to survey the structure and prepare accurate as-built drawings.

Observation-5: Non-structural elements found unbraced/not anchored. (New warehouse shed)



Description: Non-structural elements suspended from, attached to or resting atop the structure shall be adequately anchored and braced to resist earthquake forces. The factory is required to brace/anchor all non-structural elements.

Observation-6: Falling Hazard. (New warehouse shed)



Description: No fall protection was provided on the window and the edge of the floor where a clear gap was found, which may cause a falling hazard. The factory is required to provide fall protection to avoid possible falling hazards.

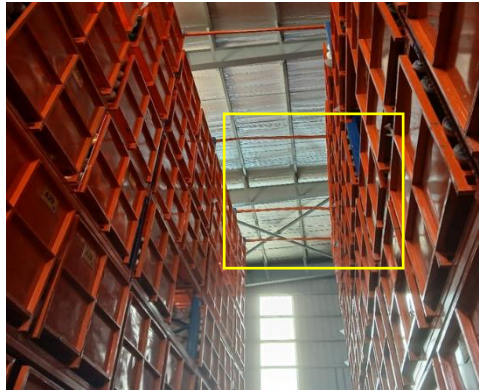
Observation-7: Gap in connection and poor joint (New warehouse shed)



Description: Connection gap was found, and poor joint details were observed.

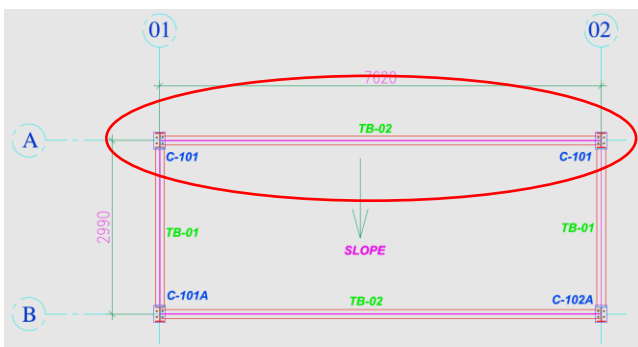
Building engineer is required to repair the gap with a suitable method and also check the connection adequacy as part of EA.

Observation-8: Damaged structural elements (New warehouse shed)



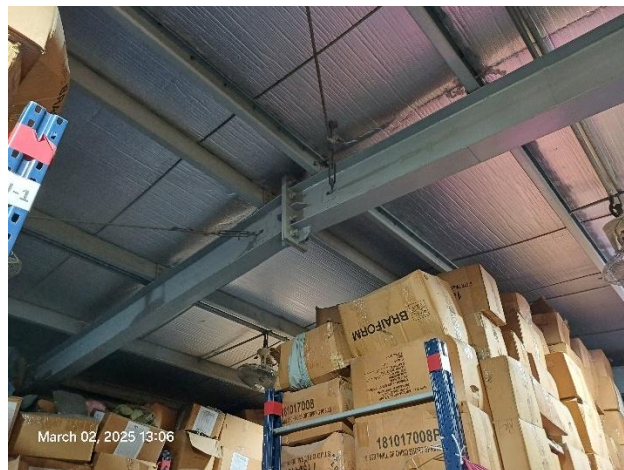
Description: Damage was observed on the braced elements of the racks. Building engineer is required to check the design of the braced elements and repair the elements with a suitable method.

Observation-9: Mismatch in as-built drawing. (Fabric Segregation Shed)



Description: As per the as-built drawing, a tie beam is missing on site. The building engineer is required to update the as-built drawing and submit it to RSC.

Observation-10: Design report is required to be reviewed by RSC for lateral loading. (Fabric Segregation Shed)



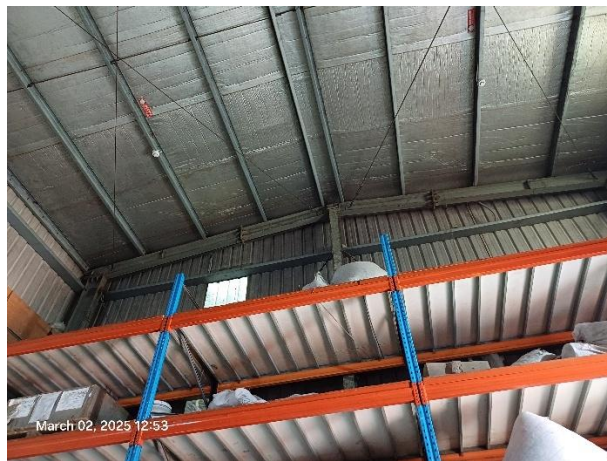
Description: The design report has been prepared for the 2-storied shed building. On the other hand, some mismatches were found. The building engineer is required to revise the design report considering the onsite condition and lateral forces.

Observation-11: Missing bolts. (Fabric Segregation Shed)



Description: Missing bolts were observed in some locations of Fabric Segregation Shed. The building engineer is required to install all missing bolts in all locations.

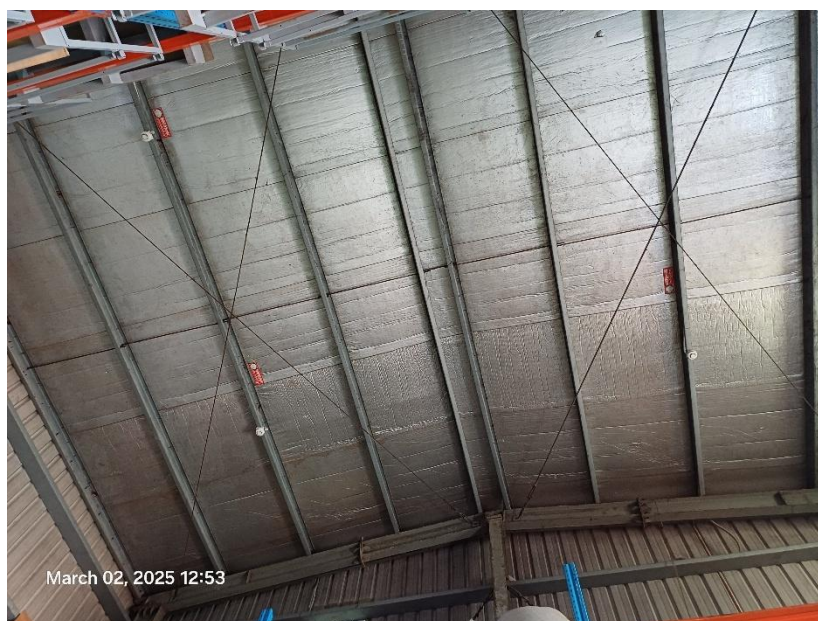
Observation-12: Lack of design documents and absence of lateral stability system. (Washing Store Shed)



Description: The roof of the structure has no obvious lateral stability system (strut). Also, no design documents were observed during the inspection.

At the time of inspection, design documents (design report, load plan and material test reports) were not available, which are required to be prepared in compliance with section 1.9.1 (part-6, BNBC).

Observation-13: Loose cable bracings on wall and roof. (Washing Store Shed)



Description: During the inspection, the bracings were found loose. Building engineer is required to tighten all the loose bracings.

Observation-14: Lack of design documents. (Chemical Store Shed)



Description: As per BNBC, every building or structure designed shall have its design documents prepared following the provision of Section 1.9.1. The design document shall include a design report and a set of structural drawings, which shall be prepared in compliance with sections 1.9.1.1 and 1.9.1.2 as per BNBC.

At the time of inspection, design documents (design report, and adequate material test reports) were not available, which are required to be prepared in compliance with section 1.9.1 (part-6, BNBC).

3. Action Plan:

Item No	Observation	Action Plan	Timeline
1.	Lack of design documents. (ETP-Building# 5)	The building engineer is required to prepare design documents (including design reports, material test reports, live load plan) in compliance with section 1.9.1 (part 6, BNBC).	within 6 weeks
2.		Carry out remedial work if required.	within 6 months
3.	Non-structural elements found unbraced/not anchored. (ETP-Building# 5)	Factory is required to brace/anchor all non-structural elements.	within 6 months
4.	Lack of design documents and incomplete lateral stability system. (New warehouse shed)	The building engineer is required to prepare Engineering Assessment (EA) and check the lateral stability of the shed.	within 6 weeks
5.		Carry out the suggested remedial work (if any).	within 6 months
6.	Mismatch in as-built drawings. (New warehouse shed)	Building engineer is required to survey the structure and prepare accurate as-built drawings.	within 6 weeks
7.	Non-structural elements found unbraced/not anchored. (New warehouse shed)	Factory is required to brace/anchor all non-structural elements.	within 6 months
8.	Falling Hazard. (New warehouse shed)	The factory is required to provide fall protection to avoid possible falling hazards.	within 6 weeks
9.	Gap in connection and poor joint detail (New warehouse shed)	Building engineer is required to repair the gap with a suitable method.	within 6 weeks
10.		Also, check the connection adequacy as part of EA.	within 6 weeks
11.	Damaged structural elements. (New warehouse shed)	Building engineer is required to check the design of the braced elements and repair the elements with a suitable method.	within 6 weeks
12.	Mismatch in the as-built drawing. (Fabric Segregation Shed)	The building engineer is required to update the as-built drawing and submit it to RSC.	within 6 weeks

13.	Design report required to be reviewed by RSC for lateral loading. (Fabric Segregation Shed)	The building engineer is required to revise the design report as per on-site conditions and for lateral loading. Submit the revised design report to RSC for review.	within 6 weeks
14.		Carry out the suggested remedial work if required.	within 6 months
15.	Missing bolts. (Fabric Segregation Shed)	The building engineer is required to install all missing bolts in all locations.	within 6 weeks
16.	Lack of design documents and incomplete lateral stability system. (Washing Store Shed)	The building engineer is required to prepare design documents (including design reports, material test reports, live load plan and accurate as-built drawings) in compliance with section 1.9.1 (part 6, BNBC). Check the lateral stability of the structure.	within 6 weeks
17.		Carry out the suggested remedial work (if any).	within 6 months
18.	Loose cable bracings on wall and roof. (Washing Store Shed)	Building engineer is required to tighten all the loose bracings.	within 6 weeks
19.	Lack of design documents. (Chemical Store Shed)	The building engineer is required to prepare design documents (including design reports, material test reports) in compliance with section 1.9.1 (part 6, BNBC).	within 6 weeks
20.		Carry out the suggested remedial work (if any).	within 6 months